

SILICON NANOPARTICLES
EMBEDDED IN POLYMER MATRIX

ABSTRACT OF THE DISCLOSURE

5 An organic polymer is used to disperse nanoparticles, such as silicon nanoparticles. The polymer matrix separates the silicon nanoparticles from each other, thus preventing them from aggregating to form clusters. The resulting silicon nanoparticles can then photoluminescence at the desired wavelengths. Such a polymer matrix with evenly dispersed silicon nanoparticles can also be used within a solar cell to increase the efficiency of such solar cell.

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